

**RAPID FLUORESCENT LABELING OF TISSUE FOR MICRODISSECTION
USING
FLUORESCENT SPECIFIC BINDING AGENTS**

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ABSTRACT OF THE DISCLOSURE

Methods are disclosed for rapid and specific fluorescent staining of biological tissue samples that substantially preserve biological molecules such as mRNA.

Methods for microdissecting tissue to obtain pure populations of cells or tissue structures based upon identifying and excising cells or tissue structures that are labeled

10 with fluorescent specific binding agents are also included. A laser capture microdissection apparatus useful for identifying and isolating cells and tissue structures following rapid immunofluorescent staining is also disclosed.

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